

MIDDLE/JUNIOR HIGH SCHOOL BUILDINGS

	<u>Student Capacity</u>	<u>Recommended Area in Square Feet</u>
C. <u>MIDDLE/JUNIOR HIGH</u>		
C1 ART		
a. Classroom	28	1,500
b. Material Storage		200
c. Exhibition Area		150
d. Photographic Darkroom		100
e. Kiln Room		400
C2 HOME ECONOMICS		
a. Foods/Nutrition	24	1,800
b. Clothing/Textiles	24	1,200
c. Laundry Room		100
d. Combination Lab	24	2,800
e. Storage		200
C3 INDUSTRIAL TECHNOLOGY/INDUSTRIAL ARTS	<u>1/</u>	
a. Classroom		
b. Introduction to Industrial Technology Lab (General Purposes)		
Communications Area	24	1,000
Energy & Power Area	24	1,000
Materials & Processing Area	24	1,000
c. Communication Technology Lab	24	2,000
Graphic Design & Layout Area	24	750
Video Production Area	24	750
Graphic Reproduction Area	24	500
Storage Area	24	500
Darkroom	24	100
Stage Area	24	50
Audio/Video Control Room	24	50

NOTE: 1/ Refer to Missouri Industrial Technology Education Guide for specific design details.

	<u>Student Capacity</u>	<u>Recommended Area in Square Feet</u>
d. Energy & Power Technology Lab	24	2,000
Transportation Systems Area	24	1,000
Mechanical Systems Area	24	600
Electrical Systems Area	24	600
Fluid Systems Area	24	600
Alternative Energy Area	24	600
Storage Area	24	400
e. Materials & Processing Technology Lab	24	3,000
Construction/Manufacturing Processing Area	24	2,000
Design & Production Planning Area	24	600
Project & Product Storage Area	24	300
Storage Areas	24	400
Finishing Room	24	150
Materials Testing Area	24	100
f. Office Area		150
g. Locker/Dressing/Wash		200/shop
C4 LANGUAGE ARTS		
a. Classroom	28	850
b. Language Laboratory	28	1,000
C5 MATHEMATICS		
a. Classroom	28	850
b. Mathematics Laboratory	28	1,000
C6 MEDIA CENTER – LIBRARY		
a. Reading/Browsing/Seating	<u>2/</u>	40/student 1,800 min.
b. Conference		800
c. Office		125
d. Materials Storage		500

NOTE: 2/ Designed to accommodate 15 percent of the total student enrollment.

	<u>Student Capacity</u>	<u>Recommended Area in Square Feet</u>
e. Viewing	8	125
f. Work Room		500
g. Storage		500
h. Production Area (teachers & students)		800
C7 MUSIC	<u>3/</u>	
a. Classroom	28	850
b. All Purpose Music Room	80	2,000 (25/student)
c. Vocal	80	1,920 (24/student)
d. Instrumental	80	2,000 (25/student)
e. Practice Room		100
f. Instrument Storage	<u>4/</u>	2/student (500 min.)
g. Uniform/Robe Storage	<u>4/</u>	1/student (500 min.)
h. Library – Resource	<u>4/</u>	1/student
i. Office		125
C8 PHYSICAL EDUCATION		
a. Gymnasium	<u>5/</u>	5,850
Two teaching stations	60	(65' x 90')
b. Safety Lanes		
Side		8
End		12
c. Spectator Seating	<u>6/</u>	3/seat

NOTE: 3/ Instrumental and vocal music classrooms should have a ceiling height of 12' to 18'.

4/ Based on maximum size of chorus and band.

5/ The clear ceiling height should not be less than 22 feet, preferably higher if basketball backboards are raised for volleyball games.

6/ Number of seats based on projected number of spectators. Folding bleacher seating is recommended.

	<u>Student Capacity</u>	<u>Recommended Area in Square Feet</u>
d. Service Area – Lobby		400
Women’s Toilet		150
Men’s Toilet		150
Concession Booth		125
Trophy Display		50
e. Multipurpose Room	40	1,400
f. Laundry		200
g. Storage (General)		150
h. Storage (Equipment)		150
i. Shower, Girls	<u>7/</u>	2/student
j. Shower, Boys	<u>7/</u>	2/student
k. Drying, Girls	<u>7/</u>	1/student
l. Drying, Boys	<u>7/</u>	1/student
m. Locker/Dressing, Girls	<u>7/</u>	24/student
n. Locker/Dressing, Boys	<u>7/</u>	24/student
o. Toilet, Girls		1/student
p. Toilet, Boys		1/student
q. Health Classroom		850
r. Offices		100/staff member

NOTE: 7/ Space should be designed to accommodate largest number of students using the facility at one time.

s. Outdoor Activities

- 1) multipurpose, hard-surfaced area – all weather area for basketball, volleyball, badminton, other court games, and handicapped student use.
- 2) track and field
- 3) football
- 4) soccer
- 5) softball
- 6) baseball
- 7) archery
- 8) tennis
- 9) general purpose-practice areas, other field games

A breakdown of outdoor spaces needed in a 950 student, middle school:

Area	Recommended Dimensions (in feet)	Space Required Sq. Ft.	Number Required	Total Required Sq. Ft.
Multipurpose	100 x 120	12,000	2	24,000
Track and Field	260 x 590	153,400	1	153,400
Football	160 x 360	57,600	2	115,200
Soccer	225 x 360	81,000	2	162,000
Softball	275 x 275	75,625	4	302,500
Baseball	350 x 350	122,500	2	245,000
Archery	90 x 225	20,250	2	40,500
Tennis	45 x 100	4,500	8	36,000
General Purpose	100 x 200	20,000	2	<u>40,000</u>
			<u>Total</u>	1,118,600

The above square footage does not include buffer zones to allow for flow-through traffic, fencing, storage, parking, bleachers, or additional areas based on program needs, greater enrollment or community use. These areas will add considerably more acreage (30-50%) to the above total. Stadiums, field houses, or hockey arenas require much additional space. Junior high schools, six year high schools and/or smaller enrollment schools might vary the number and size of some of the above areas.

	<u>Student Capacity</u>	<u>Recommended Area in Square Feet</u>
C9 FOREIGN LANGUAGE		
a. Classroom	28	850
b. Language lab	28	1,000
C10 SCIENCE		
a. Classroom	28	850
b. Biology Laboratory	28	1,000
c. Earth Science Laboratory	28	1,000
d. General Science Laboratory	28	1,000
e. Storage		75/laboratory
C11 SOCIAL STUDIES		
a. Classroom Area	28	850
b. Social Science Laboratory	28	1,000
C12 SPECIAL EDUCATION	<u>8/</u>	
a. Mental Retardation		900
b. Specific Learning Disabilities		900
c. Behavior Disorders		900
d. Physically & Other Health Impaired		1,000
e. Visually Impaired		900
f. Hearing Impaired		900
g. Speech/Language Disorders		900
h. Multiply Handicapped		1,000
i. Deaf/Blind		900
j. Autistic		900

NOTE: 8/ Standards and approvable caseloads determined by the Coordinator of Special Education, Missouri Department of Elementary and Secondary Education.

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	<u>Student Capacity</u>	<u>Recommended Area in Square Feet</u>
k. Severely Handicapped		1,000
l. Early Childhood Special Education		1,200
C13 COMPUTER LABORATORY	<u>9/</u>	1,100
C14 REMEDIAL EDUCATION		900
C15 GIFTED EDUCATION		900
C16 ADMINISTRATION		
a. Principal's Office		200
b. Assistant Principal's Office (each)		175
c. Secretary and Waiting Area		300
d. Clerk's Office		100
e. Storage		200
f. Workroom		250
g. Conference		350
h. Communications Control, Mail		150
i. Vault		75-150
C17 HEALTH SERVICES		
a. Examining Area		100
b. Cot Area		100
c. Nurse Office		100
d. Toilet (40 sq. ft. each sex)		80
e. Storage		150

NOTE: 9/ The AC power supplies should be provided for each station on a master control switch. There should be at least one telephone line into the lab to facilitate access to external data sources. Either tile or special static-free carpet should be used to prevent static electricity.

	<u>Student Capacity</u>	<u>Recommended Area in Square Feet</u>
C18 GUIDANCE SERVICES		
a. Counselors Office		100
b. Reception/Resource		180
c. Secretarial		125
d. Testing Area		150
e. Records Storage		150
f. Conference Small Group		250
C19 AUDITORIUM		
a. General Seating	<u>10/</u>	7/student
b. Stage		3,000
c. Storage		500
d. Dressing		500
C20 CUSTODIAL		
a. Office/Storage		100
b. Materials/Equipment Storage	<u>11/</u>	.3/student
c. External Storage (Grounds Equipment – Flammable Material)		150
C21 FOOD SERVICE	<u>12/</u>	
a. Dining	<u>13/</u>	15/student

NOTE: 10/ Based on maximum number of spectators projected.

11/ A custodian's service closet, including sink, should be provided on each floor of the building, convenient to general toilets, one for about each 7,500 to 10,000 square feet of floor area.

12/ Refer to Missouri Department of Health rule governing food service sanitation and the Missouri Department of Elementary and Secondary Education, School Food Services requirements.

13/ Based on 100 percent student enrollment – three lunch periods. Use as minimum 200 students.

	<u>Student Capacity</u>	<u>Recommended Area in Square Feet</u>
b. Staff Dining (optional)		500
c. Dishwashing		300
d. Dry Storage		350
e. Kitchen		850
f. Nonfood Storage		250
g. Refrigeration		250
h. Serving Line		400
i. Sink and Clean		50 each
j. Rest Room		100
k. Office		100
l. Receiving Dock, Waste Holding Area		150
C22 RESTROOMS		
a. Boys	14/	/student
b. Girls	14/	/student
c. Water Closets		
1. Boys	1 to 100	
2. Girls	1 to 45	
d. Urinals	1 to 30	
e. Lavatories	1 to 45	
f. Drinking Fountains	<u>15</u> /	1 to 75
C23 WORKROOM		
a. Faculty Room		200
b. Rest Room (1 each sex)		50

NOTE: 14/ Based on 50 percent of total student enrollment.

15/ Drinking fountains shall not be installed in restrooms.

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C24 TABLE OF WORKING HEIGHTS

	MIDDLE			
	5	6	7	8
Chalk Rails	32"		34"	
Drinking Fountains (Floor to Nozzles)	28"		34"	
Guardrails (minimum requirement)	3 ½"			
Handrails (nosing to rail) Stairways, fire escapes	28"		30"	
Lavatories	25"		28"	
Water Closets (floor to rim)	13"		13"	
Work Counters	29"		31"	
Urinals (floor to rim)	20"		22"	

Recommended
Foot Candles of
Illumination

C25 LIGHTING

a. Classrooms, Libraries, Offices	60
b. Drafting, Art, Keyboarding	80
c. Music, Seminar Rooms	60
d. Gymnasium, Multipurpose Rooms	50
e. Corridors, Service Areas	30

C26 CORRIDORS

Recommendations

a. Construction

fire-resistive in,
walls, floors and
ceilings

b. Width

1. Single-loaded corridors

- | | |
|-------------------------------------|---------|
| a. no lockers or storage | 8 feet |
| b. lockers or storage on one side | 10 feet |
| c. lockers or storage on both sides | 12 feet |

2. Double-loaded corridors

- | | |
|-------------------------------------|---------|
| a. no lockers or storage | 9 feet |
| b. lockers or storage on one side | 10 feet |
| c. lockers or storage on both sides | 12 feet |

C27 EXTERNAL AREAS

a. Walks

6' Wide

b. Parking Spaces

9' Wide 17' Long

1. Two per teaching station + 10